



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,471	01/26/2001	Mark J. Kittock	1892-174 (81841.0044)	6212

22471 7590 08/24/2004

PATENT LEGAL DEPARTMENT/A-42-C  
BECKMAN COULTER, INC.  
4300 N. HARBOR BOULEVARD  
BOX 3100  
FULLERTON, CA 92834-3100

EXAMINER

CROSS, LATOYA I

ART UNIT	PAPER NUMBER
----------	--------------

1743

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/771,471

Applicant(s)

KITTOCK ET AL.

Examiner

LaToya I. Cross

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 12-22 and 32-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 23-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4-22-03  
5-25-01
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of group I, claims 1-11 and 23-31 in the reply filed on February 19, 2004 is acknowledged. Claims 12-22 and 32-39 are withdrawn from consideration in this Office Action as being directed to non-elected subject matter.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the adapter (claim 2) and sensor (claim 9) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant

Art Unit: 1743

will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 23, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,492,400 to Yuda (Yuda '400).

Yuda '400 teaches a gripper for picking up objects and moving the objects from one place to another. The gripper comprises body portion 10 (cylinder) having three gripping fingers 20. Inside the cylinder, there exists a piston 13 and a plunger B. The plunger B is connected to and movable with the piston 13, as recited in claim 1. Also, as shown in figure 3A, the plunger extends between the gripping fingers 20. With respect to method claims 23, 25 and 26, Yuda '400 teaches that gripper operates by the fingers picking up an object. The gripper moves the object to a new location. Fluid inlets in the cylinder forcefully move the cylinder up and down in both directions. The fingers operate to grip or release the object in response to a power stroke from the piston. See col. 2, lines 7-9, lines 20-23 and lines 38-43.

5. Claims 1, 2, 6, 7 and 23-29 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2,899,232 to Walter.

Walter teaches a bottle chuck system for picking up bottles, moving the bottles from

Art Unit: 1743

one place to another and releasing the bottles after moving them (col. 1, lines 15-18). The system comprises a cylinder (15), having a piston (25), piston rod/plunger (24), and jaws/gripping members (48). The system is carried on a movable support/positioning mechanism (11) and is also connected to a source of vacuum and pressurized air. The movable support is equivalent to Applicants' claimed positioning mechanism. With respect to the method claims, Walter teaches that the system operates by the support carrying the gripper system moves to the location of the bottle and descends upon the bottle, engaging the necks of bottles (col. 1, lines 43-50). When moved downwardly onto the bottles, spring (33) forces the jaws (48) to slide onto the neck of the bottle (col. 3, lines 1-8). Walter teaches that when the bottles are moved to a new location, the body is subjected to pressure, which effects the release of the bottle by moving the jaws so that their lobes disengage from the neck of the bottle (col. 3, lines 25-30). The air source is considered to be equivalent to Applicants' claimed pneumatic means.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1743

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuda '400 in view of US Patent 4,723,503 to Yuda (Yuda '503).

The disclosure of Yuda '400 is described above. Yuda '400 differs from the instantly claimed invention in that there is no disclosure of a means, in particular a magnet and sensor, for detecting whether the vessel has been picked up.

Yuda '503 teaches a gripper assembly comprising a cylinder (10), piston (11) and gripping fingers (14). The assembly further comprises a magnetic material (A) carried by the piston (11) and a sensing switch (19) that indicate the position of the fingers and piston (col. 3, lines 5-9). It would have been obvious to one of ordinary skill in the art to incorporate a magnet and sensor into the gripper assembly of Yuda '400 to inform the user of the position of the gripper finger and piston, and to inform the user of whether the gripper fingers are in an open or closed position. With this information, the user can assure that the gripper moves into the correct position and that the object being gripped is picked up without any damage to the object or the gripper itself.

9. Claims 3-5 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuda '400 or Walter in view of US Patent 3,554,594 to Thoma.

The disclosures of both Yuda '400 and Walter are described above. Neither reference teaches making the grippers out of plastic material or chamfered bottom ends of the gripper fingers.

Art Unit: 1743

Thoma teaches a gripper assembly comprising a frame (2), piston (11) and gripping fingers (3). Thoma teaches that making the gripper out of resilient plastic material allows the device to be manufactured inexpensively and provides a material that will not damage the object being gripped (col. 2, lines 19-22, lines 37-39). The reference also teaches beveled edges at the lower portion of the gripping fingers (figure 2). It would have been obvious to one of ordinary skill in the art to make the gripper assemblies of Yuda '400 or Walter out of plastic material, because it is inexpensive and not rigid so as to damage the object being gripped. It would have been obvious to one of ordinary skill in the art to use beveled edges at lower portion of the gripping fingers in Yuda '400 or Walter to aid in gripping the object.

10. Claims 10, 11 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuda '400 or Walter in view of US Patent 6,520,315 to Sugarman et al.

The disclosures of both Yuda '400 and Walter are described above. Neither reference teaches a means for mixing the contents of the vessel being gripped (i.e. a spinning means).

Sugarman et al teach a gripper assembly having fingers (29). Sugarman et al teach combining the grippers (13, 17) to a flywheel (15) which spins the vessel being gripped and allows the contents of the vessel to dry. It would have been obvious to one of ordinary skill in the art to incorporate a spinning means in the gripper assemblies of Yuda '400 or Walter to provide a mechanism by which liquid in the vessel may be dried before further processing or testing. It is noted that Sugarman et al do not teach using a spinning means for the same reason as Applicants, however, the prior may teach a different reason for using a particular feature. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Art Unit: 1743

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 571-272-1256.

The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lic

*Yelie Hale*

*primary examiner AU 1743*